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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,425	04/11/2005	Tsuguo Fukuda	042592	7441
	590 04/18/2007 HATTORI, DANIELS &	EXAMINER		
1250 CONNECT	TICUT AVENUE, NW	KOSLOW, CAROL M		
SUITE 700 WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
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SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS		04/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

1)☐ Responsive to communication(s) filed on		Application No.	Applicant(s)					
C. Melissa Koslow 1755		10/509,425	FUKUDA ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address = Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE § MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Bediencise for many be available under the provisore of 37 CPR 1-130(i), in no event, however, may a may be timely filled in the provision of 37 CPR 1-130(i), in no event, however, may a may be timely filled if the provision of the provision of 37 CPR 1-130(i), in no event, however, may a may be timely filled. ## NO period for regly is apecified above, the maximum statutory prained will apply and will expire SIX (8) MONTHS from the malling date of this communication. Failute to represent year within the store excented period for regly in specified above, the maximum statutory prained will apply and will expire SIX (8) MONTHS from the malling date of this communication, even if timely filled, may reduce any some sparked true mallipseuros. Set 37 CR 1-174(i) Application in Six (1) — Responsive to communication(s) filled on	Office Action Summary	Examiner	Art Unit					
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.13(a). In no event, however, may a may be timely filed after Stx (9) MONTHS from the maining date of this communication. Failure to reply within the set or extended pariod for reply will, by stante, cause the application to teccine AANDONED (53 U.S. C.§ 133). Any reply received by the Office start than these montains that the Tam maining date of this communication, even if timely filed, may reduce any examely part term diplusment. See 37 CFR 1.70(b). Status 1) Responsive to communication(s) filled on communication is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1 and 2 is/are pending in the application. 4a) Of the above claim(s) is/are allowed. 5) Claim(s) 1 is/are rejected. 7) Claim(s) 2 is/are objected to. 8) Claim(s) 2 is/are objected to. 8) Claim(s) 3 is/are objected to by the Examiner. 10) The specification is objected to by the Examiner. 4) The specification is objected to by the Examiner. Application Papers 9) The specification is objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required the drawing(s) is objected to. Se 37 CFR 1.121(d). 11) The coath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). 3) Some of the certified copies of the priority documents have been received. 2 Certified copies of the priority documents have been received in Application	• • • • • • • • • • • • • • • • • • • •							
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Application/Control Number: 10/509,425

Art Unit: 1755

The information disclosure statement filed 25 September 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the articles do not include the required titles. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim 2 is objected to because of the following informalities: LaR₂Ga₃O₁₂ should be La₃R₂Ga₃O₁₂. Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the article by Guerassimova et al.

This article teaches ytterbium doped yttrium aluminum garnet single crystal having the formula $(Y_{1-x}Yb_x)_3Al_3O_{12}$, where x is 0.1 and 0.15. The taught amount of Yb and Y meet the claimed inequalities. The article teaches the claimed material. The recitation of the intended use of the claimed invention does not result in a structural difference between the claimed invention

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and the prior art and thus does not patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by the article by Yoshikawa et al

This article teaches ytterbium doped yttrium aluminum garnet single crystal having the formula $(Y_{1-x}Yb_x)_3Al_3O_{12}$, where x is 0.05, 0.17 and 0.3 and ytterbium doped lutetium aluminum garnet single crystal having the formula $(Lu_{0.67}Yb_{0.33})_3Al_3O_{12}$. The taught amount of Yb and Lu meet the claimed inequalities. The article teaches the claimed material. The recitation of the intended use of the claimed invention does not result in a structural difference between the claimed invention and the prior art and thus does not patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim 2 would be allowable if rewritten or amended to overcome the objection, set forth in this Office action.

There is no teaching or suggestion in the cited art or record of an ytterbium doped garnet having the claimed formulas.

U.S. patents 6,030,449 and 5,866,092 are cited as of interest since they teach La₈. (x+y)Yb_xGa_yO₁₂, where x is 1-3, y is 2.5-4.5 and (x+y) is 5-6.5 and Gd_{8-(x+y)}Yb_xGa_yO₁₂, where x is 1-3, y is 2.5-4.5 and (x+y) is 5-6.5. There is no suggestion or teaching in the cited art of record to replace the majority of ytterbium with yttrium or lutetium in the taught formulas. There is no suggestion or teaching in the cited art of record to replace the majority of ytterbium with gadolinium in the taught formula La_{8-(x+y)}Yb_xGa_yO₁₂. There is no teaching or suggestion in U.S.

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patent 5,866,092 that x can be 1. The article by Sablayrolles et al is cited as of interest since it teaches ytterbium doped Li₆Y(BO₃)₃, but the article was published 19 March 2005, which is after applicants' filing date of 25 March 2003.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

čmk April 12, 2007 C. Melissa Koslow Primary Examiner Tech. Center 1700